

WILLIAM L. BROWN

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Ants from Saipan, Marianas Islands

By NEAL A. WEBER, Swarthmore College,
Swarthmore, Pennsylvania

Professor R. K. Enders kindly collected for me ants on Saipan during the summer of 1949 while he was engaged in mammal studies for the Pacific Science Board under the auspices of the Office of Naval Research. These ants were principally those species coming to his mammal skinning tables and therefore represent a sampling of the scavenging, adaptable species.

The records are also of interest in representing one of the far-flung Pacific Islands, comparatively few of which have been explored from an entomological point of view until recent years. From Guam, some 125 miles south southwest, Wheeler (1912) listed 21 species of ants. From Bikini Atoll, about 1200 miles east, Cole (1949) enumerates 13 species taken in 1947. There are doubtless numerous collections made in the 1940's whose records are not presently available from this and other islands of the area.

The ants of these three islands reflect the general nature of ant distribution in the Pacific. Each contains tropicopolitan species as the chief element of the fauna. All three contain the large *Odontomachus haematoda*, the sole tropicopolitan species of the primitive ant subfamily, the Ponerinae, although a second species taken by Dr. Enders may represent another ponerine

becoming tropicopolitan. Each has two tiny species of *Monomorium* (*destructor* and *floricola*) of the subfamily Myrmicinae. Bikini has a third species of this genus, *pharaonis*, which has a greater distribution than the other two since it is adapted to life in heated apartment houses extending to the very center of the United States while the others are tropical or subtropical. The myrmicine, *Solenopsis geminata rufa*, widespread in the Pacific, is present on Saipan and Guam but absent from Bikini; *geminata* itself is neotropical and spreading. Saipan and Guam have the myrmicine, *Tetramorium guineense*, with the genus represented on Bikini by another tropicopolitan species of the genus, *simillimum*, whose original home was probably Africa. *Tapi-noma melanocephalum*, a tiny and widespread member of the Dolichoderinae, occurs on all three islands as does the world-wide and ubiquitous formicine, *Paratrechina longicornis*, along with *Nylanderia bourbonica*, the latter being paleotropical. *Camponotus reticulatus* subspecies and *C. chloroticus*, present on Guam and Bikini but absent from the Saipan collection, did not come to the skinning tables though other species of the genus (as *maculatus*) do so in other tropical areas.

None of the lists contains a clear-cut endemic species. Wheeler, however, described a new variety and a subspecies of widespread species from Guam.

The Saipan ants and their distribution are given below.

1. *Leptogenys* (*Leptogenys*) *maxillosa* (F. Smith)

A species evidently becoming tropicopolitan since known from a number of islands in the Indian Ocean, from South Africa, the Anglo-Egyptian Sudan and several of the West Indian islands. A worker which I took in Cuba of the subspecies *falcata* Roger differs chiefly in having the anterior clypeal margin angulate instead of convex. Arnold's figure of the South African form also shows the clypeal margin angulate although my Sudan specimens have this part convex as in the Saipan ants. The ants are predatory, quick in their movements and sting painfully.

2. *Odontomachus haematoda* (L.)

Tropicopolitan; large, dark brown and stinging painfully; generally carnivorous.

3. *Pheidole*, near *rinae tipuna* Forel

Although Wheeler recorded *P. javana* Mayr from Guam, the present species in the soldier caste is much smaller and less glabrous. It is also much smaller than *oceanica* and *bolaboleensis*. The Saipan soldier is close to *rinae* subsp. *tipuna* Forel but has a distinctly shorter head and is also close to the *rinae* subsp. *incensa* Wheeler types in the American Museum of Natural History.

4. *Pheidole* sp.

Workers of a second species, impossible of identification without the soldier caste, differ in being smooth, shiny and dark rather than being densely punctate and pale.

5. *Cardiocondyla emeryi* Forel

One dealate female of this cosmopolitan species.

6. *Vollenhovia pedestris* F. Smith

Not in the Guam or Bikini lists. The workers agree well with Mann's British Solomon specimens; subspecies are known from New Guinea, the Seychelles, Borneo, the Philippines and other paleotropical localities.

7. *Monomorium destructor* (Jerdon)

Tropicopolitan; tiny and reddish yellow.

8. *Monomorium floricola* (Jerdon)

Tropicopolitan; even smaller than the preceding and a shiny dark brown in color.

9. *Solenopsis geminata* subspecies *rufa* (Jerdon)

Showing the mesosternal spine characteristic of this widespread paleotropical form of the cosmopolitan species. I have

this also from the island of Samar, Philippines (U.S.N.). Safford (1905) says of this form on Guam that "these little creatures when out on foraging expeditions, travel in lines and sting every animal that crosses their path. Sometimes young chickens are killed by them. They are common in houses, and it is not unusual on turning in at night to find a line of them crossing the bed." I have observed similar habits in the typical neotropical form.

10. *Tetramorium guineense* (Fabr.)

A common tropicopolitan species with generalized habits.

11. *Tapinoma melanocephalum* (Fabr.)

Tropicopolitan and a house pest where it often feeds on greasy substances.

12. *Technomyrmex albipes* F. Smith?

One worker with gaster and petiole missing may well be this paleotropical species.

13. *Plagiolepis* (*Anoplolepis*) *longipes* (Jerdon)

A large, spindly, paleotropical species.

14. *Paratrechina* (*Nylanderia*) *bourbonica* Forel

A species chiefly of the islands of the Indian and Pacific Oceans. A colony with alate females was taken in the packing about radio parts in a box in a warehouse.

LITERATURE CITED

- COLE, A. C. 1949. The ants of Bikini Atoll, Marshall Islands. Pan-Pacific Ent. 25 (4): 172-174.
SAFFORD, W. E. 1905. The useful plants of the island of Guam. Contrib. U. S. Nat. Mus. 9: 92.
WHEELER, W. M. 1912. The ants of Guam. Jour. N. Y. Ent. Soc. 20: 44-48.